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BARNES & THORNBURG 11 SOUTH MERIDIAN INDIANAPOLIS, IN 46204			USTARIS, JOSEPH G	
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			2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/844,413

Applicant(s)

EMSLEY ET AL.

Examiner

Joseph G. Ustaris

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 39-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13-26 and 29-38 is/are rejected.
- 7) ☒ Claim(s) 11, 12, 14, 27, 28 and 31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/12/2002.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-38, drawn to a testing instrument for testing networks, classified in class 725, subclass 107.
  - II. Claims 39-41, drawn to a testing instrument for testing signal strength, classified in class 348, subclass 193.

The inventions are distinct, each from the other because of the following reasons:

Inventions Group I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable.

In the instant case, invention Group I has separate utility such as testing computer networks.

Furthermore, invention Group II has a separate utility such as testing the signal strength of signals transmitted over computer networks. See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Richard Conard on June 20, 2005 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-38. Affirmation of this election must be made by applicant in replying to this

Office action. Claims 39-41 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Claim Objections***

2. Claims 14 and 31 are objected to because of the following informalities:

- Claims 14 and 31 recite minor grammatical errors -- "information if first..."

Appropriate correction is required.

Claim 27 is objected to under 37 CFR 1.75.

Claim 27 recites the limitation "the serial port" in line 22. There is insufficient antecedent basis for this limitation in the claim. The examiner recommends --a serial port--.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

Art Unit: 2617

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 13, 19, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Ditzik (US006167376A).

Regarding claim 13, Ditzik discloses a system that an "input port for receiving first information from the network", where the system can receive voice data and hand written data (See Figs. 3 and 4, telephony means 8 and external comm. Means 4; column 6 lines 1-20). The system also has a "signature pad permitting a user to enter handwritten communication for transmission over the network" (See Figs. 3 and 4, pen/stylus input means 10; column 6 line 63 – column 8 line 30); wherein the telephony means or external comm. means serves as the "port for coupling handwritten communication-related signals to the network" (See Figs. 3 and 4; column 6 line 63 – column 8 line 30).

Regarding claim 19, the system includes "an audio transducer coupled to the computer" that produces sounds in response to an audio signal or "third information received from the computer" (See Fig. 3, speaker means 12 and audio/sound card means 13).

Regarding claim 35, the system includes a "web browser capable of handling Internet communication protocols" (See column 6 lines 40-50).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 25, 26, 29-34, 36, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Budinger et al. (US006802032B1) in view of Chappell (US006425132B1).

Regarding claim 1, Budinger et al. (Budinger) discloses an instrument for "testing a CATV network" (See Fig. 1, handheld computer 50A or 50B; column 4 lines 30-35). The computer has "an input port for receiving first information from the network" where the computer can receive status and error messages from the equipment that are part of the network (See Figs. 1 and 2; column 3 lines 19-35 and column 7 line 61 – column 8 line 5). The handheld computer furthermore has a "user interface" to enter commands (See Fig. 3) and the computer is coupled to the network through a serial port or "a serial port for coupling to the network" (See Figs. 1 and 2; column 7 lines 8-20). However, Budinger does not disclose creating "second information for communication over the network".

Chappell discloses a system for testing a CATV system (See Fig. 1). Chappell discloses a mobile field client that is able to connect to the CATV network. The technician is able to test upstream communications by entering data into the field client that will be sent to the headend or "second information for communication over the

Art Unit: 2617

network". The results from the message are sent back to the field client in order for the technician to determine the condition of the CATV system (See column 5 line 59 – column 6 line 30). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the handheld computer disclosed by Budinger to perform testing on the reverse path by creating "second information for communication over the network", as taught by Chappell, in order to increase the testing capabilities of the handheld computer thereby providing the user with more tools to troubleshoot the network with.

Regarding claim 2, "wherein the serial port is an RS-232 port" (See Budinger Fig. 2B).

Regarding claim 3, "further including an RF section for processing signals received from the CATV network" (See Chappell Fig. 4; column 9 lines 31-40).

Regarding claim 4, "further including an analog-to-digital (A/D) converter, the A/D converter coupled to the RF section for conversion of RF section output into digital RF-related signals" (See Chappell Fig. 4, A/D 206).

Regarding claim 5, "further including a digital signal processor (DSP), the A/D converter coupled to the DSP for processing of the digital RF-related signals", wherein the controller processes the signals (See Chappell Fig. 4, controller 200).

Regarding claim 6, inherently the "first information is first analog information" in order for the (A/D) converter to convert "the first analog information to first digital information" (See Chappell Fig. 4, A/D 206).

Regarding claim 7, the A/D converter is coupled to the controller or "DSP" for processing the first digital information (See Chappell Fig. 4, A/D 206 and controller 200).

Claim 25 contains the limitations of claim 1 and is analyzed as previously discussed with respect to that claim. Furthermore, the handheld computer also couples to the network through an LAN port or "Ethernet interface" (See Budinger column 3 lines 35-47 and column 7 lines 8-20).

Regarding claim 26, Budinger in view of Chappell does not disclose a "Web browser capable of handling Internet communication protocols".

Official Notice is taken that it is well known for computers to have a "Web browser capable of handling Internet communication protocols". Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the handheld computer disclosed by Budinger in view of Chappell to include a "Web browser capable of handling Internet communication protocols" in order to increase the capabilities of the handheld computer thereby providing the user with more resources to troubleshoot the network with.

Claim 29 contains the limitations of claims 6 and 25 and is analyzed as previously discussed with respect to those claims.

Claim 30 contains the limitations of claims 7 and 29 and is analyzed as previously discussed with respect to those claims.

Claim 31 contains the limitations of claims 3, 6, and 25 and is analyzed as previously discussed with respect to those claims.



Claim 32 contains the limitations of claims 4 and 31 and is analyzed as previously discussed with respect to those claims.

Claim 33 contains the limitations of claims 5 and 32 and is analyzed as previously discussed with respect to those claims.

Claim 34 contains the limitations of claims 1 and 26 and is analyzed as previously discussed with respect to those claims.

Regarding claim 36, "the input port and output port are RF ports" (See Chappell Fig. 4, 272; column 9 lines 30-40).

Claim 38 contains the limitations of claims 25 and 36 and is analyzed as previously discussed with respect to those claims.

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Budinger et al. (US006802032B1) in view of Chappell (US006425132B1) as applied to claims 1-7, 25, 26, 29-34, 36, and 38 above, and further in view of Chang et al. (US006891803B1).

Regarding claim 8, Budinger in view of Chappell does not disclose an "audio transducer coupled to the computer for producing audio signals in response to third information received from the computer".

Chang et al. (Chang) discloses a telecommunications transmission test unit (See Fig. 2). The transmission test unit includes a speaker or "audio transducer" that is coupled to the unit inherently producing a sound or "audio signal" that are in response to audio data or "third information received from the computer" (See Fig. 2, speaker 218;

Art Unit: 2617

column 5 lines 8-22). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the handheld computer disclosed by Budinger in view of Chappell to include an "audio transducer coupled to the computer for producing audio signals in response to third information received from the computer", as taught by Chang, in order to increase the capabilities of the handheld computer thereby allowing different means of communicating information to the user.

Regarding claim 9, Budinger in view of Chappell and in further view of Chang does not disclose a "digital-to-analog (D/A) converter coupled between the computer and the audio transducer for converting the third information into signals to be transduced by the audio transducer".

Official Notice is taken that it is well known to use D/A converters to convert signals that are to be outputted by analog speakers or "audio transducers". Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the handheld computer disclosed by Budinger in view of Chappell and in further view of Chang to include a "digital-to-analog (D/A) converter coupled between the computer and the audio transducer for converting the third information into signals to be transduced by the audio transducer" in order make the handheld computer more compatible with different analog speakers.

Regarding claim 10, Budinger in view of Chappell and in further view of Chang discloses a controller or "DSP" that would inherently be "coupled to the computer and to the D/A converter for processing third information and for supplying processed third

information to the D/A converter” in order to successfully produce sounds from the speaker (See Chappell Fig. 4 and Chang Figs. 2 and 3A).

Claims 14-18, 20, 21 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ditzik (US006167376A) in view of Beriont (US005479202A).

Claim 14 contains the limitations of claim 13 and is analyzed as previously discussed with respect to that claim. Ditzik does disclose that the computer can communicate in analog network (See Ditzik column 8 lines 1-30). However, Ditzik does not explicitly disclose a “RF section for processing the first information”.

Ditzik does disclose that the computer system can be used over a cable television interface (See Ditzik column 7 lines 19-25 and column 8 lines 1-30). Beriont discloses a receiver used within cable television network. Beriont discloses a TV tuner or “RF section for processing the first information” that is able to receive signals and process the signals accordingly (See Fig. 2, TV tuner 24). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the computer system disclosed by Ditzik to include a “RF section for processing the first information”, as taught by Beriont, in order to increase the capabilities of the computer system thereby providing more services to the user.

Regarding claim 15, “further including an analog-to-digital (A/D) converter, the A/D converter coupled to the RF section for conversion of RF section output into digital RF-related signals” (See Beriont Fig. 2, A/D 25).

Regarding claim 16, "further including a digital signal processor (DSP), the A/D converter coupled to the DSP for processing of the digital RF-related signals" (See Beriont Fig. 2, DSP 28).

Regarding claim 17, inherently the "first information is first analog information" in order for the (A/D) converter to convert "the first analog information to first digital information" (See Beriont Fig. 2, A/D 25).

Regarding claim 18, "further including a digital signal processor (DSP), the A/D converter coupled to the DSP for processing the first digital information" (See Beriont Fig. 2, DSP 28 and A/D 25).

Regarding claim 20, "further including a digital-to-analog (D/A) converter coupled between the computer and the audio transducer for converting the third information into signals to be transduced by the audio transducer" (See Beriont Fig. 2, D/A 29 and Speaker 31).

Regarding claim 21, "further including a digital signal processor (DSP) coupled to the computer and to the D/A converter for processing third information and for supplying processed third information to the D/A converter" (See Beriont Fig. 2, DSP 28 and D/A 29).

Regarding claim 37, Ditzik in view of Beriont discloses the input port is a RF port (See Beriont Fig. 2, port 21). However, Ditzik does not disclose an RF port as an output port.

Official Notice is taken that 2-way cable television networks are well known, wherein the RF port serves as both the input and output port. Therefore, it would have

Art Unit: 2617

been obvious to one with ordinary skill in the art at the time the invention was made to modify the network disclosed by Ditzik in view of Beriont to be a 2-way cable television network, wherein the RF port serves as both the input and output port, in order to provide a more efficient network thereby requiring less connections at the user's site.

Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ditzik (US006167376A).

Claims 22, 23, and 24 contains the limitations of claim 13 and is analyzed as previously discussed with respect to that claim. However, Ditzik does not explicitly disclose a "serial port, RS-232 port, or an Ethernet interface".

Official Notice is taken that it is will known for computer systems to have a serial port, RS-232 port, or an Ethernet interface. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the computer system to include at least one serial port, RS-232 port, or an Ethernet interface in order to increase the capabilities of the computer system thereby making the computer system more compatible with other various units.

#### ***Allowable Subject Matter***

5. Claims 11, 12, 27, and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 11, 12, 27, and 28, the prior art of record fails to show or fairly suggest a signature pad coupled to the serial port permitting transmission of signature pad-related signals over the network.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please take note of Shi et al. (US006310646B1), Burns et al. (US006662135B1), and Morgan et al. (US006859828B1) for their similar methods of testing networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph G. Ustaris whose telephone number is 571-272-7383. The examiner can normally be reached on M-F 7:30-5PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JGU

June 22, 2005



VIVEK SRIVASTAVA  
PRIMARY EXAMINER